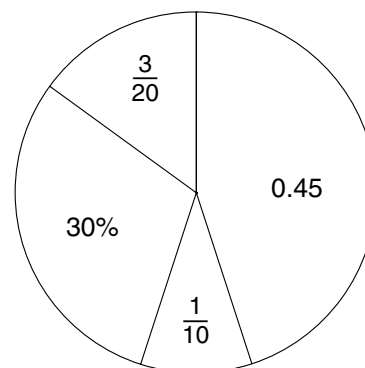


**CHAPTER**  
**8** **Review**  
**Percents****8-1 Relating Decimals, Fractions, and Percents** (pp. 400–403)

Find the equivalent values missing from the table for each value given on the circle graph.

	Fraction	Decimal	Percent
1.	$\frac{9}{20}$	0.45	
2.	$\frac{1}{10}$		
3.	$\frac{3}{10}$		30%
4.	$\frac{3}{20}$		

**8-2 Finding Percents** (pp. 405–408)

Find each number or percent.

5. What number is 38% of 55?

\_\_\_\_\_

7. Huber Printing has budgeted \$2040 per month for advertising. If the monthly operating budget is \$34,000, what percent is budgeted for advertising?

\_\_\_\_\_

6. 75 is what percent of 1500?

\_\_\_\_\_

8. Research has shown that at 10 years of age, a girl has reached 84.4% of her adult height. As an adult, Gwen is 62 inches tall. If research is correct, then to the nearest tenth of an inch, how tall would she have been at age 10?

\_\_\_\_\_

**8-3 Finding a Number When the Percent is Known** (pp. 410–414)

Find each number.

9. 48 is 30% of what number?

\_\_\_\_\_

11. A lot has trees covering  $33\frac{1}{3}\%$  of the area. If the trees cover 8166.7 ft<sup>2</sup>, what is the total lot area to the nearest whole square foot.

\_\_\_\_\_

10. 325% of what number is 1430?

\_\_\_\_\_

12. Darryl sold a 1956 baseball card of Mickey Mantle for \$1250. This was 160.3% of what he paid for it 10 years ago. To the nearest dollar, what did Darryl pay for the card?

\_\_\_\_\_

## CHAPTER

## 8

**Review****Percents (continued)****8-4 Percent Increase and Decrease** (pp. 416–419)

Find each percent increase or decrease.

13. Gene has a garden 6 ft by 8 ft that he is increasing to 10 ft by 12 ft. Find the percent he has increased the square footage of the garden.
14. A shirt was originally priced at \$29.99. It has been remarked to sell for \$21.95. Find the percent decrease in price to the nearest tenth of a percent.

**8-5 Estimating with Percents** (pp. 420–423)

Estimate.

15. 21% of 25 \_\_\_\_\_
16. 31 out of 120 \_\_\_\_\_
17. 9% of 210 \_\_\_\_\_

Estimate each number or percent.

18. 50% of 31 is about what number?
19. About what percent of 92 is 45?

**8-6 Applications of Percents** (pp. 424–427)

20. James earns a salary of \$1500 a month plus a commission of 3.5% of his sales. Last month his sales totaled \$25,000. How much did he earn for the month?
21. Colleen bought a shirt for \$24.95 and a jacket for \$45.99. If the sales tax rate is 7.75%, what was the total cost of her purchase?

**8-7 More Applications of Percents** (pp. 428–431)

22. Lera borrowed \$12,250 to be repaid after 5 years at an annual simple interest rate of 6.25%. How much interest will be due after 5 years? How much will Lera have to repay?
23. Which loan would cost the borrower less: \$3000 at 5% for 4 years or \$3000 at 5.75% for 3 years? How much interest would the borrower save by taking the less expensive loan?

## LESSON 8-7 Problem Solving

### More Applications of Percents

Write the correct answer.

- Joanna's parents agree to loan her the money for a car. They will loan her \$5,000 for 5 years at 5% simple interest. How much will Joanna pay in interest to her parents?  
**\$1250**
- How much money will Joanna have spent in total on her car with the loan described in exercise 1?  
**\$6250**

- A bank offers simple interest on a certificate of deposit. Jaime invests \$500 and after one year earns \$40 in interest. What was the interest rate on the certificate of deposit?  
**8%**
- How long will Howard have to leave \$5000 in the bank to earn \$250 in simple interest at 2%?  
**2.5 years**

Jan and Stewart Jones plan to borrow \$20,000 for a new car. They are trying to decide whether to take out a 4-year or 5-year simple interest loan. The 4-year loan has an interest rate of 6% and the 5-year loan has an interest rate of 6.25%. Choose the letter for the best answer.

- How much will they pay in interest on the 4-year loan?  
A \$4500 C \$5000  
**B \$4800 D \$5200**
- How much will they repay with the 4-year loan?  
F \$24,500 H \$25,000  
**G \$24,800 J \$25,200**
- How much will they pay in interest on the 5-year loan?  
A \$5000 C \$6250  
B \$6000 D \$6500
- How much will they repay with the 5-year loan?  
F \$25,000 H \$26,250  
G \$26,000 J \$26,500
- How much more interest will they pay with the 5-year loan?  
A \$1000  
**B \$1450 C \$1500 D \$2000**
- If the Stewarts can get a 5-year loan with 5.75% simple interest, which of the loans is the best deal?  
**F 4 year, 6% G 5 year, 5.75% H 5 year, 6.25% J Cannot be determined**

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## LESSON 8-7 Puzzles, Twisters & Teasers

### Your Lucky Number!

Fill in the blanks to complete the chart.

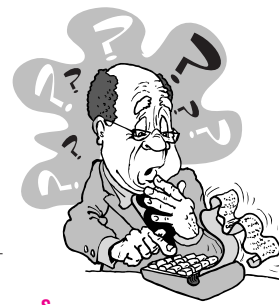
Use the letters next to the answers to solve the riddle.

\$ amount	Interest Rate	Years	Interest	Total Amount
\$225	5%	3	\$33.75	<b>\$258.75 S</b>
\$4250	7%	1.5	<b>\$446.25 L</b>	\$4696.25
\$397	5%	1	<b>\$19.85 R</b>	\$416.85
\$700	6.25%	2	\$87.50	<b>\$787.50</b>
\$775	8%	1	\$62.00	<b>\$837.00 O</b>
\$650	4.5%	2	<b>\$58.50 E</b>	\$708.50
\$2975	6%	1	<b>\$178.50 I</b>	\$3153.50
\$500	9%	3	\$135.00	<b>\$635.00 T</b>
\$1422	3%	5	<b>\$213.30 G</b>	\$1635.30
\$1500	3.85%	6	<b>\$346.50 N</b>	\$1846.50

Why did the banker quit his job?

Because he was

**L** **O** **S** **I** **G**  
 446.25 837.00 178.50 213.30  
**I** **N** **T** **E** **R** **S** **T**  
 346.50 635.00 58.50 19.85 258.75



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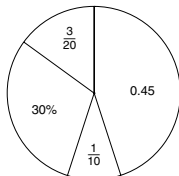
## CHAPTER 8 Review

### Percents

**8-1 Relating Decimals, Fractions, and Percents** (pp. 400–403)

Find the equivalent values missing from the table for each value given on the circle graph.

	Fraction	Decimal	Percent
1.	$\frac{9}{20}$	0.45	<b>45%</b>
2.	$\frac{1}{10}$	<b>0.10</b>	<b>10%</b>
3.	$\frac{3}{10}$	<b>0.30</b>	30%
4.	$\frac{3}{20}$	<b>0.15</b>	<b>15%</b>



**8-2 Finding Percents** (pp. 405–408)  
Find each number or percent.

- What number is 38% of 55?  
**20.9**
- 75 is what percent of 1500?  
**5%**
- Huber Printing has budgeted \$2040 per month for advertising. If the monthly operating budget is \$34,000, what percent is budgeted for advertising?  
**6%**
- Research has shown that at 10 years of age, a girl has reached 84.4% of her adult height. As an adult, Gwen is 62 inches tall. If research is correct, then to the nearest tenth of an inch, how tall would she have been at age 10?  
**52.3 in.**

**8-3 Finding a Number When the Percent is Known** (pp. 410–414)  
Find each number.

- 48 is 30% of what number?  
**160**
- 325% of what number is 1430?  
**440**
- A lot has trees covering  $33\frac{1}{3}\%$  of the area. If the trees cover 8166.7 ft<sup>2</sup>, what is the total lot area to the nearest whole square foot?  
**24,500 ft<sup>2</sup>**
- Darryl sold a 1956 baseball card of Mickey Mantle for \$1250. This was 160.3% of what he paid for it 10 years ago. To the nearest dollar, what did Darryl pay for the card?  
**\$780**

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## CHAPTER 8 Review

### Percents (continued)

**8-4 Percent Increase and Decrease** (pp. 416–419)

Find each percent increase or decrease.

- Gene has a garden 6 ft by 8 ft that he is increasing to 10 ft by 12 ft. Find the percent he has increased the square footage of the garden.  
**150%**
- A shirt was originally priced at \$29.99. It has been remarked to sell for \$21.95. Find the percent decrease in price to the nearest tenth of a percent.  
**26.8%**

**8-5 Estimating with Percents** (pp. 420–423) **Estimates may vary.**  
Estimate.

- 21% of 25 **5**
- 31 out of 120 **25%**
- 9% of 210 **21**

Estimate each number or percent.

- 50% of 31 is about what number?  
**15**
- About what percent of 92 is 45?  
**50%**

**8-6 Applications of Percents** (pp. 424–427)

- James earns a salary of \$1500 a month plus a commission of 3.5% of his sales. Last month his sales totaled \$25,000. How much did he earn for the month?  
**\$2375**
- Colleen bought a shirt for \$24.95 and a jacket for \$45.99. If the sales tax rate is 7.75%, what was the total cost of her purchase?  
**\$76.44**

**8-7 More Applications of Percents** (pp. 428–431)

- Lera borrowed \$12,250 to be repaid after 5 years at an annual simple interest rate of 6.25%. How much interest will be due after 5 years? How much will Lera have to repay?  
**\$3828.13; \$16,078.13**
- Which loan would cost the borrower less: \$3000 at 5% for 4 years or \$3000 at 5.75% for 3 years? How much interest would the borrower save by taking the less expensive loan?  
**\$3000 at 5.75% for 3 yr; \$82.50**

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